

Please replace the paragraph beginning on line 24, page 8 with the following amended paragraph:

A preferred optical fiber storage spool which may be used in accordance with the invention is illustrated in Fig[[s]]. ~~6A and 6B~~6, which shows, ~~respectively~~, side and bottom views of preferred shipping spool 15. As shown in Fig. 6, the spool 15 includes a primary barrel portion 60, and lead meter barrel portion 62, and an angled slot 64 through which fiber can be fed during the winding process from the lead meter portion 64 to the primary barrel portion 62, or vice versa depending on desired winding techniques. Such spools are described further, for example, in US Patent Serial No. 09/438,112, filed November 10, 1999, titled System and Method for Providing Under-Wrap Access to Optical Fiber Wound Onto Spools, which claims the benefit of U.S. Provisional Application Nos. 60/114,516, filed December 30, 1998, and 60/115540, filed January 12, 1999, the specification of which is hereby incorporated by reference. In a preferred embodiment of the invention, the fiber is fed onto spool 15 beginning at lead meter barrel portion 62. When a desired amount of fiber has been stored on the lead meter portion 62, the fiber is then fed through the slot and onto primary barrel portion 60, and a desired amount of fiber is then wound onto primary barrel portion 60. Once the spool is full and/or a desired amount of fiber is contained within the primary barrel portion 60, the fiber is cut, e.g. between the fiber winding system and the fiber screening system and rotating turret 40 indexes 180 degrees to provide another empty storage spool 15 onto which fiber can again be wound. The previously filled spool is then removed, and an empty spool loaded in its place, and so forth, so that when the newly provided empty spool is filled, the next spool will ready, and so forth. One reason shipping spool 15 is preferred is that fiber may be stored on spool 15 in a manner which enables access to both ends of the fiber. Because the spool enables access to both ends of the fiber, optical and other testing can be conducted on the fiber which is stored on spool 15 after the fiber draw and winding process, without having to remove the entire length of fiber from the spool or rethread the fiber onto a different spool.

Please replace the paragraph beginning on line 26, page 12 with the following amended paragraph:

The breaks that occur during a fiber draw operation can be broken down into two basic categories, pre-screener breaks, which are breaks that occur in the fiber before the fiber has reached the screener capstan 24, and post-screener breaks, which are breaks that occur in the

fiber after the fiber has passed the screener capstan 24. By monitoring the load cells attached to turnaround pulley [[20]] 22 and the position of dancer arm 32, the control computer can control operation of the winding system and react to breaks which occur at various points in the winding operation. For example, when a pre-screener break occurs, the load cell on turnaround pulley 22 will almost immediately register zero load. Consequently, when the computer senses that the load at turnaround pulley is zero, the computer initiates a control sequence for rethreading of the fiber through the screener capstan as well as the remainder of the winding system.

Please replace the paragraph beginning on line 29, page 15 with the following amended paragraph:

Threading of the winder section

Threading of the winder section 14 preferably takes place simultaneous with the threading of the screener section 12. Thus, referring to Fig. 3, when a pre-screener break is detected by the turnaround pulley 22 load cell, the first actions of winder section 14 occur simultaneously to facilitate threading of the winding section by the aspirator. In Fig. 3, a pair of rotatable fiber storage spools 15 are mounted 180 degrees apart on turret 40. In the embodiment illustrated, only one of the spools 15 is visible, and is collecting fiber being supplied via the fiber draw process. The other fiber storage spool 15 is positioned 180 degrees, or directly underneath the spool 15 which is visible. The other spool 15 is empty and ready to be moved into position to receive fiber from the fiber draw process. Also visible in Fig. 3 is dancer platform [[56]] 34, upon which dancer pulley [[32]] 30b is mounted via armature 32. Dancer platform [[56]] 34 is movable along a transverse slide (not shown), from the closed position illustrated, in which dancer pulley [[32]] 30b is engaging fiber 8 and forcing fiber 8 to take a serpentine path, to an open position, in which dancer pulley [[32]] 30b is moved and positioned on the other side of the path of fiber 8. In Fig. 3, dancer pulley [[32]] 30b is shown in the closed position. Likewise, pulley 30c is mounted on a traverse (not shown), which is capable of moving pulley 30c into and out of engaging position with the path of fiber 8. As mentioned above, while the guide fingers 45a and 45b are moving the fiber 8 toward screener capstan 24 to thread the screener 24, aspirator 16 and thus fiber 8 are simultaneously moved toward the winding section 14. At the same time, three things preferably occur simultaneously:

(1) the winder turret 40 indexes 180 degrees so that a new empty fiber storage spool 15 is in place for winding;

- (2) the new spool 15 begins rotating slightly faster than the linear speed of the incoming fiber; and
- (3) the pulley 30a, dancer pulley 30b and pulley 30c are moved on their respective traverse slides into an open position (as shown in Fig. 5a) to enable threading of the fiber 8 through winder section 14. For this to occur pulley 30c is moved along its own pneumatic slide toward a position outboard of the fiber path.

Please replace the paragraph beginning on line 25, page 17 with the following amended paragraph:

Cases also exist where the fiber is broken somewhere between the screener capstan and the take up spool. The first case may be when the take up spool is full. A second case occurs when the fiber is detected that is out of specification (e.g. the diameter is too large or too small). In either of these two cases, an automatic fiber cutter [[36]] intentionally cuts the fiber. Such a mechanical cutting device may be positioned, for example, just before the fiber enters the first process pulley 30a. A third case of a post screener break occur when something unexpected causes the fiber to break (stray fiber, nicked process pulley, etc...) after the screener capstan 24.